

Chapter NR 102

WATER QUALITY STANDARDS FOR  
WISCONSIN SURFACE WATERS

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History: Chapter NR 102 as it existed on September 30, 1973 was repealed and a new chapter NR 102 was created, effective October 1, 1973.

**NR 102.01 Purpose.** (1) The purpose of this chapter is to establish, in conjunction with chs. NR 103 to 105, water quality standards for surface waters of the state pursuant to s. 144.025 (2) (b), Stats. This chapter describes the designated use categories for such waters and the water quality criteria necessary to support these uses. This chapter and chs. NR 103 to 105 constitute the water quality standards for the surface waters of Wisconsin.

(2) Water quality standards shall protect the public interest, which includes the protection of public health and welfare and the present and prospective uses of all waters of the state for public and private water supplies, propagation of fish and other aquatic life and wild and domestic animals, domestic and recreational purposes, and agricultural, commercial, industrial, and other legitimate uses. In all cases where the potential uses are in conflict, water quality standards shall protect the general public interest.

(3) Water quality standards serve as a basis for developing and implementing control strategies to achieve legislative policies and goals. Water quality standards are the basis for deriving water quality based effluent limitations. Water quality standards also serve as a basis for decisions in other regulatory, permitting or funding activities that impact water quality.

History: Cr. Register, February, 1989, No. 398, eff. 3-1-89.

**NR 102.02 Applicability.** The provisions of this chapter are applicable to surface waters of Wisconsin.

History: Cr. Register, February, 1989, No. 398, eff. 3-1-89.

**NR 102.03 Definitions.** (1) "Mixing zone" means a region in which a discharge of different characteristics than the receiving water is in transit and progressively diluted from the source to the receiving system.

(2) "Natural conditions" means the normal daily and seasonal variations in climatic and atmospheric conditions, and the existing physical and chemical characteristics of a water or the course in which it flows.

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(3) "Natural temperature" means the normal existing temperature of a surface water including daily and seasonal changes outside the zone of influence of any artificial inputs.

(4) "Resource management" means the application of control techniques to enhance or preserve a surface water in accordance with statutory provisions and in the general public interest.

(5) "Sanitary survey" means a thorough investigation and evaluation of a surface water including bacteriological sampling to determine the extent and cause of any bacterial contamination.

(6) "Surface waters" means all natural and artificial named and unnamed lakes and all naturally flowing streams within the boundaries of the state, but not including cooling lakes, farm ponds and facilities constructed for the treatment of wastewaters (the term waters as used in this chapter means surface waters).

(7) "Unauthorized concentrations of substances" means pollutants or other chemicals introduced into surface waters without prior permit or knowledge of the department, but not including accidental or unintentional spills.

(8) "Best practicable control technology" means that level of treatment established by the department under s. 147.04 (2) (a), Stats., for categories and classes of point sources to be achieved by not later than July 1, 1977.

(9) "Best available control technology" means that level of treatment established by the department under s. 147.04 (2) (b) 1., Stats., for categories and classes of point sources to be achieved by not later than July 1, 1983.

(10) Class I and Class II trout waters are as defined in s. NR 1.02 (7).

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; r. (1), renum. from NR 102.01, Register, February, 1989, No. 398, eff. 3-1-89; cr. (10), Register, May, 1993, No. 449, eff. 6-1-93.

NR 102.04 Categories of standards. (1) GENERAL. To preserve and enhance the quality of waters, standards are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all waters including the mixing zone and the effluent channel meet the following conditions at all times and under all flow conditions:

(a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.

(b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.

(c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.

(d) Substances in concentrations or combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

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2. Namekagon river between its confluence with the St. Croix river and the outlet of Lake Namekagon in Bayfield county.

(b) *State wild and scenic rivers.* All state wild and scenic rivers designated under s. 30.26, Stats., including:

1. Pike river in Marinette county.

2. Pine river and its tributary Popple river in Florence and Forest counties.

(c) Wolf river upstream of the northern Menominee county line.

(d) The following Class I trout waters:

1. Adams county — Big Roche-a-Cri creek

2. Barron county — Yellow river

3. Bayfield county — Flag river, Sioux river

4. Burnett county — North Fork Clam river, South Fork Clam river

5. Chippewa county — Duncan creek, Elk creek, McCann creek

6. Door county — Black Earth creek above the easternmost CTY KP crossing

7. Door county — Logan creek

8. Douglas county — Bois Brule river and its tributaries

9. Dunn county — Elk creek

10. Florence county — Brule river including Montagne creek and Riley creek tributaries; tributaries to the Pine-Popple rivers including Chipmunk, Cody, Haley, Haymarsh, LaMontagne, Lepage, Lunds, Martin, Olson, Patten, Pine, Riley, Rock, Simpson, Seven Mile, Wakefield and Woods creeks; Little Popple river

11. Forest county — Brule river

12. Iowa county — Love-Strutt creek, Trout creek

13. Kewaunee county — Little Scarboro creek

14. Langlade county — Clearwater creek, Drew creek, Evergreen river, South Branch Oconto river

15. Lincoln county — Center fork New Wood creek, Little Pine creek, Prairie river

16. Marathon county — Holt creek, Spranger creek, Plover river

17. Marinette county — Cedarville creek, Otter creek, Holmes creek, East Thunder creek, North fork Thunder river, Eagle creek, Little Eagle creek, Plumadore creek, Meadow brook, Upper Middle Inlet creek, Middle Inlet creek, Wausaukee river, Little Wausaukee creek, Coldwater brook, Medicine brook, South Branch Miscauno river, Miscauno river, Swede John creek, South Branch Pemebonwon river, Spikehorn creek, Silver creek, Little Silver creek, Sullivan creek; tributaries to the Pike river including Little South Branch Pike river, Camp D creek, Camp F creek, Camp 9 creek, Cole creek, Glen creek, Harvey creek, North

Branch Harvey creek, South Branch Harvey creek, Hemlock creek, Holloway creek, K.C. creek, Little Harvey creek, Lost creek, MacIntire creek, Phillips creek, Sackerson creek, Shinns creek, Sidney creek, Smeesters creek, Springdale brook, Whiskey creek

18. Marquette county — Chaffee creek, Lawrence creek, Tagatz creek

19. Monroe county — Rullands Coulee creek

20. Oconto county — First South Branch Oconto river, Second South Branch Oconto river, South Branch Oconto river, Hills Pond creek

21. Polk county — Clam river, McKenzie creek

22. Portage county — Emmons creek, Radley creek, Sannes creek, Tomorrow river, Trout creek

23. Richland county — Camp creek

24. Sheboygan county — Nichols creek

25. St. Croix county — Kinnickinnic river above STH "35"

26. Vernon county — Rullands Coulee creek, Spring Coulee creek, Timber Coulee creek

27. Vilas county — Deerskin river, Plum creek

28. Walworth county — Bluff creek, Potawatomi creek, Van Slyke creek

29. Waupaca county — Emmons creek, Griffin creek, Jackson creek, Leers creek, Peterson creek, Radley creek, Sannes creek, Spaulding creek, Trout creek, Whitcomb creek, North Branch Little Wolf river

30. Waushara county — Willow creek north of Redgranite, Mecan river north of Richford, Little Pine creek, West Branch White river

(e) The following Class II trout waters:

1. Barron county — Yellow river

2. Burnett county — North Fork Clam river

3. Forest county — Brule river, Peshtigo river

4. Grant county — Big Green river, Castle Rock creek

5. Marinette county — Peshtigo river

6. Polk county — McKenzie creek

7. Vilas county — Plum creek

(f) The following cold or warm water streams and rivers or portions thereof:

1. Barron

Engle Creek  
Hickey Creek  
Upper Pine Creek

Class I & II Portions  
Class I & II Portions  
Above Dallas Flowage

2. Bayfield	Bark River	All-Class I Portion
	Big Brook	All
	Cranberry River & Tribs.	All-Class I Portion
	East Fork Iron River & Tribs.	All-Class I Portion
	East Fork White River	All-Class I Portion
	Eighteen Mile Cr. & Tribs.	All-Class I Portion
	Fish Creek (Main)	All
	Long Lake Branch & Tribs.	From below Drummond Lake to White River
		All-Class I Portions
	No. Fork Fish Creek & Tribs.	All-Class I & II Portions
	Onion River & Tribs.	All-Class I Portions
	Pikes Creek & Tribs.	All-Class I Portion
	Sioux River & Tribs.	All-Class I & II Portions
	So. Fork White River	All-Class I Portion
Thompson Creek	All-Class I Portion	
Twenty Mile Creek	All-Class I & II Portions	
White River	All-Class I Portion	
Whittlesy Creek & Tribs.	All-Class I Portions	
3. Burnett	Tributaries to the N. & S. Forks of the Otam River	All-Class I & II Portions
4. Dane	Mt. Vernon Creek	All-Class I Portion
5. Door	Mink River	All
6. Forest	Allen Creek	All
	Brule Creek	All
	Elvoy Creek	All
	Jones Creek	Class I & II portions
	North Otter Creek	All
7. Grant	Little Green River	All
8. Iron, Ashland & Price	No. Fork Flambeau River	From Turtle-Flambeau Flowage Dam downstream to Park Falls
9. LaCrosse	Berge Coulee Creek	All
10. Langlade	Elton Creek	Class I Portion
	Little Evergreen Creek	All
	Mayking Creek	All
	Michelson Creek	All
	Mid Branch Embarrass River	Class I Portion
	Falstad Creek	Class II Portion
11. Marathon	So. Branch Embarrass River	Class I Portion
12. Marinette	No. Branch Beaver Creek	Entire River & tributaries
13. Oneida	Noisy Creek	Class II Portion
14. Pierce	Kinnickinnic River	From Powell Dam to St. Croix River
15. Polk	Sand Creek & Tribs	All-Class I & II Portions
16. Price, Rusk & Sawyer	So. Fork Flambeau River	All-Round L. Dam downstream to Jxn with No. Fork Flambeau R.
17. Richland	Elk Creek	All
18. Rusk	Devils Creek	All-Class I & II Portions
	So. Fork Main Creek	Class I & II Portions (T35N R3W S28 downstream to T34N R4W S11)
19. Sauk	Otter Creek	From headwaters to southern section line of T11N R6E S33
	Parfrey's Glen	From headwaters to CTH "DL"
20. Sawyer	Benson Creek	All-Class I Portion
	Eddy Creek	All-Class I Portion
	Grindstone Creek	All-Class I Portion
	Little Weigor Creek & Tribs	All-Class I & II Portions
	McDermott Creek	All
	Mosquito Brook	All-Class I Portion

21. Shawano	Middle Br. Embarrass R. No. Br. Embarrass R. So. Br. Embarrass R.	Origin to but not including Homme Pond Origin to CTH "J" Origin to but not including Tigerton Pond
22. Vilas	Allequash Springs Brule Creek East Br. Blackjack Cr. Elvoy Creek & Springs Mishonagon Creek Siphon Creek Spring Meadow Creek Tamarack Creek	Class I & II Portions All All Class I & II Portions Class I & II Portions All Class I Portion All
23. Washburn	Beaver Brook Sawyer Creek So. Fork Bean Brook	All-Class I Portion All-Class I & II Portions All-Class I Portion

(1m) The following lakes are designated as outstanding resource waters:

1. Ashland	Bad River Slough Kakagon Slough
2. Barron	Bear Lake (T36N R12W S2) Red Cedar Lake Sand Lake Silver Lake
3. Bayfield	Bark Bay Slough Diamond Lake Middle Eau Claire Lake Namekagon Lake Owen Lake Pike Chain of Lakes (Pike, Millicent, Buskey Bay, Hart, Twin Bear, Eagle, Flynn and Hildur Lakes) Star Lake Upper Eau Claire Lake
4. Burnett	Big Mckenzie Lake Big Sand Lake Sand Lake (T40N R15W S25)
5. Columbia	Crystal Lake
6. Douglas	Bond Lake Lower Eau Claire Lake Nebagamon Lake Upper St. Croix Lake Whitefish Lake (Bardon)
7. Florence	Edith Lake Keyes Lake Lost Lake Perch Lake Riley Lake, South
8. Forest	Butternut Lake Franklin Lake Lucerne Lake (Stone) Metonga Lake
9. Iron	Catherine Lake Cedar Lake Hewitt Lake Owl Lake Trude Lake Turtle-Flambeau Flowage
10. Oconto	Archibald Lake Bass Lake (T32N R16E S9) Bear Paw Lake Boot Lake Chain Lake

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|---------------|--|
| 11. Oneida    | Big Carr Lake<br>Clear Lake (T39N R7E S16)<br>Little Tomahawk Lake<br>Tomahawk Lake<br>Two Sisters Lake  |
| 12. Polk      | Pipe Lake  |
| 13. Price     | Cochram Lake<br>Tucker Lake  |
| 14. Rusk      | Bass Lake (T34N R9W S16)<br>Fish Lake<br>Island Chains of Lakes<br>(Chain, Clear, McMann, and<br>Island Lakes)<br>Three Lakes No. 1 (T36N<br>R9W S25)  |
| 15. St. Croix | Bass Lake (T30N R19W S23)<br>Perch Lake  |
| 16. Sauk      | Devils Lake  |
| 17. Sawyer    | Barker Lake<br>Blaisdell Lake<br>Camp Smith Lake<br>Evergreen Lake<br>Grindstone Lake<br>Lac Court Oreilles<br>Lake Chippewa (Chippewa<br>Flowage)<br>Nelson Lake<br>Osgood Lake<br>Perch Lake (T42N R6W S25)<br>Round Lake (Big Round)<br>Sand Lake<br>Spider Lake<br>Teal Lake<br>Whitefish Lake |
| 18. Vilas     | Black Oak Lake<br>Crab Lake<br>Crystal Lake (T41N R7E<br>S27)<br>Lac Vieux Desert<br>North Twin Lake<br>Pallette Lake (Clear)<br>Partridge Lake<br>Plum Lake<br>South Twin Lake<br>Star Lake<br>Stormy Lake<br>Trout Lake<br>White Sand Lake (T24N R7E<br>S26)                                     |
| 19. Walworth  | Lulu Lake  |
| 20. Washburn  | Bass Lake (T40N R10W S17)<br>Long Lake<br>Middle McKenzie Lake<br>Shell Lake<br>Stone Lake (T39N R10W<br>S24)  |
| 21. Waukesha  | Spring Lake (T6N R18E S9)  |
| 22. Waupaca   | Graham Lake (Nelson)<br>North Lake   |
| 23. Waushara  | Gilbert Lake<br>Lucerne Lake (Egans)<br>Norwegian Lake<br>Pine Lake (Springwater)  |

(2) The waters in sub. (1) and (1m) may not be lowered in quality.

(3) Surface waters, or portions thereof, may be added to, or deleted from, the outstanding resource waters designation through the rule making process under the provisions of ch. 227, Stats., and s. NR 2.03.

History: Cr. Register, February, 1989, No. 398, eff. 3-1-89; am. (1) (d), cr. (1) (e), Register, July, 1989, No. 403, eff. 8-1-89; cr. (1) (f) and (1m), am. (2), Register, May, 1993, No. 449, eff. 6-1-93.

**NR 102.11 Exceptional resource waters.** (1) Surface waters which provide valuable fisheries, hydrologically or geologically unique features, outstanding recreational opportunities, unique environmental settings, and which are not significantly impacted by human activities may be classified as exceptional resource waters. All the following surface waters are designated as exceptional resource waters:

(a) Class I trout waters listed in Wisconsin Trout Streams publication 6-3600 (80) that are not listed in s. NR 102.10.

(b) Other Class I trout waters:

1. Abraham Coulee creek in section 29, township 20 north, range 8 west from its headwaters to the Abraham Coulee road bridge in Trempealeau county.

2. Bear creek originating in section 3, township 20 north, range 7 west in Trempealeau county.

3. Biser creek originating in section 19, township 12 north, range 3 west in Sauk county.

4. Bostwick creek from CTH M upstream 6.2 miles to the headwaters in LaCrosse county.

5. Bufton Hollow creek originating in section 23, township 12 north, range 2 west in Richland county.

6. Columbus creek originating in section 29, township 20 north, range 6 west in Jackson county.

7. Dutch creek originating in section 12, township 19 north, range 8 west in Trempealeau county.

8. Joe Coulee creek originating in section 1, township 20 north, range 7 west in Trempealeau county.

9. Little creek originating in section 21, township 20 north, range 6 west in Jackson county.

10. Marble creek originating in section 30, township 10 north, range 3 east in Sauk county.

11. Marshall creek originating in section 4, township 11 north, range 1 west in Richland county.

12. Martin creek originating in section 22, township 6 north, range 2 east in Iowa county.

13. South Bear creek originating in section 2, township 12 north, range 2 west in Richland county.

14. Spring brook downstream from CTH Y south of Antigo to its confluence with the Eau Claire river in Marathon county.

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15. Spring Coulee creek from the headwaters to SE  $\frac{1}{4}$ , SE  $\frac{1}{4}$ , section 33, township 16 north, range 1 east in Monroe county.
16. Unnamed creek 2-12 originating in section 36, township 20 north, range 7 west of Trempealeau county.
17. Unnamed creek 4-9 originating in section 4, township 11 north, range 1 west in Richland county.
18. Unnamed creek 5-6 originating in section 6, township 19 north, range 8 west in Trempealeau county.
19. Unnamed creek 7-4 originating in section 6, township 20 north, range 7 west in Trempealeau county.
20. Unnamed creek 8-9 originating in section 5, township 20 north, range 7 west in Trempealeau county.
21. Unnamed creek 8-14 originating in section 1, township 20 north, range 8 west in Trempealeau county.
22. Unnamed creek 9-13 originating in section 4, township 20 north, range 6 west in Jackson county.
23. Unnamed creek 10-8 originating in section 10, township 11 north, range 1 west in Richland county.
24. Unnamed creek 10-10 originating in section 14, township 20 north, range 6 west in Jackson county.
25. Unnamed creek 11-4 originating in section 1, township 20 north, range 7 west in Trempealeau county.
26. Unnamed creek 11-7 originating in section 2, township 20 north, range 7 west in Trempealeau county.
27. Unnamed creek 13-3a originating in section 19, township 20 north, range 6 west in Trempealeau county.
28. Unnamed creek 13-3b originating in section 6, township 20 north, range 6 west in Trempealeau county.
29. Unnamed creek 15-13 originating in section 1, township 20 north, range 8 west in Trempealeau county.
30. Unnamed creek 15-4 originating in section 3, township 20 north, range 6 west in Trempealeau county.
31. Unnamed creek 16-2 originating in section 22, township 20 north, range 6 west in Jackson county.
32. Unnamed creek 17-5 originating in SE  $\frac{1}{4}$ , section 5, township 20 north, range 6 west in Jackson county.
33. Unnamed creek 24-3a originating in section 24, township 11 north, range 1 west in Richland county.
34. Unnamed creek 26-7 originating in section 2, township 20 north, range 6 west in Jackson county.
35. Unnamed creek 34-2 originating in section 17, township 20 north, range 8 west in Trempealeau county.

36. Unnamed creek 34-15 originating in section 27, township 20 north, range 7 west in Trempealeau county.

37. Unnamed stream originating in section 29, township 10 north, range 3 east in Sauk county.

38. Washington Coulee creek originating in section 29, township 20 north, range 6 west in Jackson county.

(c) The following Class II trout waters:

1. Ashland county — White river above the Bad River Indian reservation

2. Bayfield county — White river

3. Dane county — Mt. Vernon creek

4. Forest county — North Branch Oconto river

5. Grant county — Blue river

6. Iowa county — Blue river

7. Langlade county — Prairie river, South Branch Oconto river

8. Lincoln county — Prairie river

9. Marquette county — Mekan river

10. Oconto county — North Branch Oconto river, South Branch Oconto river

11. Pierce county — Rush river

12. Portage county — Tomorrow river

13. Richland county — Willow creek

14. St. Croix county — Willow river, Race Branch

15. Waushara county — Mekan river

(d) The following cold or warm water streams and rivers or portions thereof:

1. Barron	Brill River	All-Class II Portion
2. Crawford	Copper Creek	All
	Plum Creek	All
	Sugar Creek	From headwaters to T10N R6W S10
	Tainter Creek	From Vernon County Line to CTH "B"
3. Dane	Blue Mounds Branch	All
	Deer Creek	All
	Dunlap Creek	All
	Elvers Creek (Bohn Cr.)	All
	Flynn Creek	All
	Fryes Feeder Creek	All
	Garfoot Creek	All
	Milum Creek	All
	Rutland Branch	All
	Ryan Creek	All
	Schalpbach Creek	All
	Sixmile Creek	All
	Spring Creek (Lodi)	All

## DEPARTMENT OF NATURAL RESOURCES

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4. Dane, Sauk, Iowa, Grant, Richland, Crawford	Wisconsin River	From below Prairie du Sac to Prairie du Chien
5. Dane & Green	Little Sugar River Story Creek (Tipperary)	Above New Glarus All, originating in T5N R8E S36
6. Dunn	Sugar Creek Sand Creek	All From Chippewa County Line to mouth
7. Eau Claire	Lowes Creek	From Hwy 37 & 85 upstream to headwaters
8. Fond du Lac	Feldner's Creek Lake Fifteen Creek	From headquarters to Misco's Millpond Entire Creek above & below Lake Fifteen
9. Forest	Armstrong Creek Middle Br. Peshtigo R. North Br. Peshtigo R. North Br. Popple R. West Br. Armstrong Creek	All All All All Class II Portion
10. Grant	Doc Smith Branch Little Platte River	All From Arthur downstream to Platte River
11. Grant & Iowa	Big Spring Branch	From Springhead to Blue River
12. Green	Burgy Creek Gill Creek Hefty Creek, North Branch Hefty Cr., Center Branch Liberty Creek Norwegian Creek Richland Creek Ross Crossing Sylvester Creek Spring Valley Creek Ward Creek	All All All All All All All All All All All
13. Green & Rock	Allen Creek	Below Evansville
14. Iowa	Harker-Lee-Martin System	From headwaters to T6N R2E S10
15. Iron	Maintowish River	All
16. Jackson	Trempealeau River	From STH 95 at Hixton to CTH "P" at Taylor
17. Jefferson	Allen Creek	All
18. Kewaunee	Casco Creek	From T24N R24E S19 downstream of Rock Ledge to Kewaunee River
19. La Crosse	Bostwick Creek Coon Creek Dutch Creek	From headwaters to County Hwy "O" All From headwaters to Russian Coulee Road (section 8)
20. Lafayette	Galena River	From headwaters to Buncombe Road
21. Langlade	East Br. Eau Claire R. Hunting River	From STH 64 upstream to firelane crossing in T33N R11E S35 SW¼ From Fitzgerald Dam Road downstream to T33N R11E S1
22. Lincoln	North Br. Prairie River Silver Creek	From headwaters to CTH "J" to T33N R8E All
23. Manitowoc	Branch River	All

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24. Monroe	Big Creek	From headwaters to Acorn Rd (S7)	
	Farmers Valley Creek & Tribs	From headwaters to I-90 (S19)	
25. Oneida	Soper Creek	All	
	Bearskin Creek	From Tomahawk River to Little Bearskin Lake	
26. Pierce	Big River	Class I Portion	
	Cady Creek	From CTH "P" upstream	
27. Richland	Trimbelle River	All	
	Babb Hollow	All-Trib to Mill Creek	
	Hanzel Creek (Hansell)	All-Trib to Melancthon Cr.	
	Melancthon Creek	Class II Section	
	Coulter Hollow Creek	All-Trib to Mill Creek	
	E. Branch Mill Creek	All	
	Happy Hollow Creek	All-Trib to Willow Creek	
	Higgins Creek	All-Trib to Mill Creek	
	Hood Hollow Creek	All-Trib to Mill Creek	
	Jacquish Hollow Creek	All-Trib to Willow Creek	
	Kepler Branch	All-Trib to Mill Creek	
	Mill Creek	From headwaters to above Boaz	
	Miller Branch	All-Trib to Mill Creek	
	Pine Valley Creek	All-Trib to Mill Creek	
	Ryan Hollow	All-Trib to West Branch Mill Creek	
	28. Rock	Wheat Hollow Creek	All
		W. Branch Mill Creek	All
Bass Creek		All	
East Fork Raccoon Cr.		All	
Little Turtle Creek		All	
Raccoon Creek		All	
Spring Brook		All	
Turtle Creek		All	
29. Rusk	Unnamed Creek T2N R14E S31	All	
	Big Weirgor Creek	All-Class III Portion	
30. Rusk, Taylor & Chippewa	Jump River	From Village of Jump River downstream to Holcombe Flowage	
31. Sauk	Beaver Creek (Trib to Dell Creek)	All	
	Camels Creek (Trib to Dell Creek)	All	
	Dell Creek	All	
32. Shawano	Kroenke Creek	Class II Portion	
	Red River	From Lower Red Lake Dam to Wolf River	
33. Sheboygan	West Br. Red River	Class II Portion	
	Ben Nutt Creek	Class II Portion to Junction with Mill Creek	
34. St. Croix	Apple River	From NSP plant below CTH "I" to Mouth	
	Cady Creek	All	
	Willow River	Extend Class II Portion into Delta in Lake Mallileau	
35. St. Croix & Pierce	St. Croix River	From No. Boundary of Hudson City limits to the river mouth in Pierce Co.	
36. Trempealeau	Buffalo River	From Hwy 53 to Strum Pond	
37. Vernon	Bishop Branch	All	
	Cheyenne Valley Creek	All	
	Coon Creek	From La Crosse county line to Chaseburg	
	Frohock Valley Creek	All	
	Hornby Creek	All	
	Reads Creek	All	
	Tainter Creek	All	

38. Vilas	Manitowish River	From Rest Lake Dam downstream to Iron County line
39. Washington	E. Branch Milwaukee R.	From Long Lake outlet to STH 28
40. Waukesha	Genesee Creek Mukwonago River Oconomowoc River	Above STH 59 From Eagle Springs Lake to Upper Phantom Lake From below North Lake to Okauchee Lake
41. Waupaca	Blake Brook & Branches Little Wolf River	Class II Portion From junction with Wolf River upstream to Manawa Dam
42. Waupaca & Shawano	Waupaca River Embarrass River	Class II portion From Wolf River upstream to dam at Pella
43. Waushara	Lower Pine River	From below Wild Rose Millpond to dam at Poy Sippi

(2) The waters identified in sub. (1) may not be lowered in quality except as provided in ch. NR 207.

(3) Surface waters, or portions thereof, may be added to, or deleted from, the exceptional resource waters designation through the rule making process under the provisions of ch. 227, Stats., and s. NR 2.03.

History: Cr. Register, February, 1989, No. 398, eff. 3-1-89; cr. (1) (c), Register, July, 1989, No. 403, eff. 8-1-89; cr. (1) (d), Register, May, 1993, No. 449, eff. 6-1-93.

**NR 102.12 Great Lakes waters.** (1) The following surface waters are designated as Great Lakes waters:

- (a) Lake Michigan, including Green Bay.
- (b) Lake Superior.

(2) For the purpose of administering ch. NR 207 and consistent with chs. NR 105 and 106, the waters identified in sub. (1) and their tributaries are to be protected from the impacts of persistent, bioaccumulating toxic substances by avoiding or limiting to the maximum extent practicable increases in these substances.

History: Cr. Register, February, 1989, No. 398, eff. 3-1-89.

**NR 102.13 Fish and aquatic life waters.** All surface waters not included in s. NR 102.05 (1) (b) 1, 2, 3 or 5 are fish and aquatic life waters.

History: Cr. Register, February, 1989, No. 398, eff. 3-1-89.

**NR 102.14 Taste and odor criterion.** (1) At certain concentrations, substances may not be toxic to humans, but may impart undesirable taste or odor to water or aquatic organisms ingested by humans. The taste and odor criterion is derived to prevent substances from concentrating in surface waters or accumulating in aquatic organisms to a level which results in undesirable tastes or odors to human consumers.

(2) The taste and odor criterion is derived as follows:

(a) For substances which impart tastes and odors to waters, the taste and odor criterion shall equal that threshold concentration ( $TC^w$ ) below which objectionable tastes or odors to human consumers do not occur.

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Threshold concentrations for substances imparting tastes and odors to water are listed in Table 1.

Table 1

Threshold Concentrations (TC<sup>w</sup>) for Substances Causing Taste and Odor in Water

Substance	Threshold Concentration (ug/L) <sub>1</sub>
Acenaphthene	20
Chlorobenzene	20
2-Chlorophenol	0.1
3-Chlorophenol	0.1
4-Chlorophenol	0.1
Copper	1000
2,3-Dichlorophenol	0.04
2,4-Dichlorophenol	0.3
2,5-Dichlorophenol	0.5
2,6-Dichlorophenol	0.2
3,4-Dichlorophenol	0.3
2,4-Dimethylphenol	400
Hexachlorocyclopentadiene	1
2-Methyl-4-Chlorophenol	1800
3-Methyl-4-Chlorophenol	3000
3-Methyl-6-Chlorophenol	20
Nitrobenzene	30
Pentachlorophenol	30
Phenol	300
2,3,4,6-Tetrachlorophenol	1
2,4,5-Trichlorophenol	1
2,4,6-Trichlorophenol	2
Zinc	5000

<sup>1</sup>A threshold concentration expressed in micrograms per liter (ug/L) can be converted to milligrams per liter (mg/L) by dividing the threshold concentration by 1000.

(b) For substances which impart tastes or odors to aquatic organisms, the taste and odor criterion shall be calculated as follows:

$$TOC = \frac{TC^i}{BAF}$$

Where: TOC = Taste and odor criterion in milligrams per liter (mg/L).  
 TC<sup>i</sup> = Threshold concentration in milligrams of substance per kilogram of wet tissue weight (mg/kg) of the aquatic organism being consumed below which undesirable taste and odor is not detectable to human consumers as derived in par. (d).  
 BAF = Aquatic life bioconcentration factor with units of liter per kilogram (L/kg) as derived in s. NR 105.10.

(c) The lower of the taste and odor criteria derived as specified in pars. (a) and (b) is applicable to surface waters classified as public water supplies. The taste and odor criteria derived as specified in par. (b) is applicable to Great Lakes, cold water, and warm water sport fish communities.

(d) Threshold concentrations for substances imparting tastes or odors to water (TC<sup>w</sup>) other than those listed in Table 1 and threshold concentrations for substances imparting tastes or odors to aquatic organisms (TC<sup>i</sup>) shall be selected by the department using its best professional judgment.

History: Cr. Register, February, 1989, No. 398, eff. 3-1-89.